



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/530,010	10/03/2005	Sang-Won Lee	8947-000129/US	7873
30593 7590 11/09/2007 HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 8910 RESTON, VA 20195			EXAMINER GADDY, BENJAMIN E	
			ART UNIT 4181	PAPER NUMBER
			MAIL DATE 11/09/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/530,010	LEE, SANG-WON	
	Examiner	Art Unit	
	Benjamin E. Gaddy	2609	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: "Door locking system using voice recognition combined with keypad password entry."

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 4 recites the limitation "the input keys disposed inside the door" in lines 18-19.

There is insufficient antecedent basis for this limitation in the claim. For purposes of examination, it will be assumed that claim 4 was intended to depend from claim 3, rather than claim 1 as currently indicated.

3. Claims 9 and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims recite the phrase "enable the user to a message" in the last line of each, respectively. This is unclear. For purposes of examination, it will be assumed that the applicant intended to claim "enable the user to generate a message."

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Foster (US 5,668,929) in view of Naik (US 5,548,647).

Consider claim 1: Foster discloses a voice recognition doorlock apparatus (**see Col. 2, lines 33-37, where Foster discusses a speech activated security device**) comprising: first input means, having a plurality of input keys, for outputting input key signals corresponding to the input keys whenever the input keys are pressed (**see Col. 3, line 66 – Col. 4, line 5, where Foster discusses push buttons**); second input means for receiving an analog voice signal and converting the received analog voice signal to a digital voice signal (**see Col. 4, lines 5-10, where Foster discusses a microphone pickup**); voice analyzing means for receiving the digital voice signal to extract a specific voice signal from the digital voice signal in a registration mode and storing the extracted specific voice signal in first storing means as an ID of a registration-desiring user (**see Col. 5, lines 60-65, where Foster discusses a processor for speech recognition**); control means for storing input key signals which is inputted through the first input means in the registration mode and indicates a password (**see Col. 5, lines 45-50, where Foster discusses a predetermined code**); and doorlock driving means for locking or unlocking a doorlock according to the control of the control means, wherein the voice analyzing means determines whether a currently inputted digital voice signal matches the specific voice signal stored in the first storing means to generate a first flag signal, as a determining result (**see**

Art Unit: 2609

Col. 8, lines 33-40, where Foster discusses a lock control circuit); wherein when the currently inputted voice signal matches the specific voice signal stored in the first storing means, the control means determines whether the input key signals currently inputted as the password matches the input key signals stored in the second storing means in response to the first flag signal (**see Col. 5, lines 50-60, where Foster discusses reciting a code**); and wherein when the currently input key signals matches the input key signals stored in the second storing means, the control means control the door lock to be unlocked by the doorlock driving means (**see Col. 5, line 60 – Col. 6, line 5, where Foster discusses actuating a lock**).

Foster does not specifically disclose storing in a registration mode, however Naik discloses storing in a registration mode (**see Col. 5, lines 33-40, where Naik discusses storing during enrollment**). It would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Foster, and use storing in a registration mode as taught by Naik, thus providing a reference template against which comparison is made, as discussed by Naik (**see Col. 5, lines 36-40**).

3. Claims 2 and 8-10 rejected under 35 U.S.C. 103(a) as being unpatentable over Foster (US 5,668,929) in view of Naik (US 5,548,647) as applied to claim 1 above, and further in view of Kishi (US 4,450,545).

Consider claim 2: Foster and Naik disclose voice generating means for generating a voice signal according to the control of the control means (**see Col. 9, lines 30-35, where Foster discusses status is indicated audibly**); and first sensing means for sensing an open/close state of a door and transmitting the sensing result to the control means.

Art Unit: 2609

Foster and Naik do not specifically disclose sensing an open/close state, however Kishi discloses sensing an open/close state (**see Col. 2, lines 15-26, where Kishi discusses a door position detector**). It would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Foster and Naik, and use sensing an open/close state as taught by Kishi, thus producing an output signal when the door is opened, as discussed by Kishi (**see Col. 2, lines 15-20**).

Consider claim 8: Foster and Naik disclose the input keys include an interphone key (**see Col. 6, lines 29-35, where Naik discusses a telephone set**); and wherein when the interphone key is pressed, the control means controls the voice generating means to enable a user to output a predetermined voice message signal (**see Col. 5, lines 10-20, where Naik discusses the verification system outputs a response**).

Consider claim 9: Foster and Naik disclose when the interphone key is pressed, the control means controls the voice analyzing means, the voice generating means, and the first input means to enable the user to generate a message (**see Col. 5, lines 33-40, where Naik discusses generating and storing a template**).

Consider claim 10: Foster and Naik disclose the input keys include a record key; and wherein when the record key is pressed, the control means controls the voice analyzing means, the voice generating means, and the first input means to enable the user to generate a message (**see Col. 5, lines 33-40, where Naik discusses generating and storing a template**).

4. Claims 3-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Foster (US 5,668,929) in view of Naik (US 5,548,647) as applied to claim 1 above, and further in view of Losey (US 6,606,492).

Consider claim 3: Foster and Naik disclose a part of the input keys are disposed outside a door (see Col. 3, lines 39-45, where Foster discusses the device is mounted).

Foster and Naik do not specifically disclose other input keys inside the door, however Losey discloses other input keys inside the door (see Col. 2, lines 55-60, where Losey discusses another keypad). It would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Foster and Naik, and use other input keys inside the door as taught by Losey, thus allowing entering of a code while inside, as discussed by Losey (see Col. 2, lines 55-60).

Consider claim 4: Foster and Naik disclose sensing means for sensing an illegal handling of the input keys and transmitting the sensing result to the control means (see Col. 6, lines 1-5, where Foster discusses deactivating the system).

Foster and Naik do not specifically disclose input keys inside the door, however Losey discloses input keys inside the door (see Col. 2, lines 55-60, where Losey discusses another keypad). It would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Foster and Naik, and use input keys inside the door as taught by Losey, thus allowing entering of a code while inside, as discussed by Losey (see Col. 2, lines 55-60).

Consider claim 5: Foster, Naik and Losey disclose when the input keys disposed inside the door are not illegally handled by a person, the control means controls the voice generating means to output a warning sound in response to the sensing result transmitted from the second sensing means (see Col. 6, lines 1-5, where Foster discusses a buzzer).

Consider claim 6: Foster, Naik, and Losey disclose the voice analyzing means includes a dual tone multi-frequency (DTMF) generator (see Col. 6, lines 29-35, where Naik discusses a telephone set and a DTMF generator); and wherein when the control means generates a second flag signal indicating that the door is forcibly opened, the DTMF generator generates a MTMF signal (see Col. 8, lines 35-50, where Foster discusses reporting tampering).

Consider claim 7: Foster discloses radio transmitting means for transmitting the DTMF signal (see Col. 8, lines 35-45, where Foster discusses radio).

Conclusion

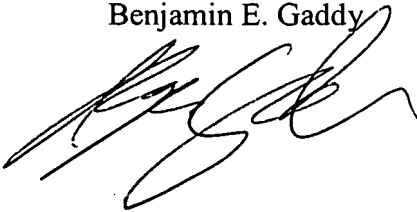

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin E. Gaddy whose telephone number is (571) 270-5134. The examiner can normally be reached on M-TH 9am - 4pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nick Corsaro can be reached on (571) 272-7876. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Art Unit: 2609

Benjamin E. Gaddy

A handwritten signature in black ink, appearing to be "B. E. Gaddy", written in a cursive style.A handwritten signature in black ink, appearing to be "Nick Corsaro", written in a cursive style.

NICK CORSARO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600